

## STATE OF WASHINGTON DEPARTMENT OF ECOLOGY

3100 Port of Benton Blvd • Richland, WA 99352 • (509) 372-7950

April 26, 2007

Mr. Keith A. Klein Richland Operations Office United States Department of Energy P.O. Box 550, MSIN: A7-50

Re: Signed Hanford Federal Facility Agreement and Consent Order (HFFACO) Change Package Number M-16-07-03

Dear Mr. Klein:

The Department of Ecology is denying the above HFFACO Change Package. We do not believe that the United States Department of Energy (USDOE) has provided a sufficient basis for the requested changes. Specifically, USDOE is requesting the deletion of interim Milestone M-16-50 "Initiate interim response actions for remaining waste sites for 100-H Area," yet it does not provide any planning information to support completion of the subsequent interim Milestone M-16-51 "Complete the interim remedial actions for the 100 H Area," by December 2010. With proper planning in place to demonstrate attainment of the M-16-51 completion milestone, Ecology would be open to revising the milestone to delay the start date for 100-H remedial actions. In no event, however, is Ecology willing to delete it completely.

Ecology acknowledges that recent data have indicated groundwater contamination in the 100-D Area, for chromium, far above any concentrations previously observed. Ecology believes these concentrations may pose an imminent and substantial endangerment to the Columbia River. As such, it is appropriate for USDOE to focus its resources on remediating known sources of chromium, as well as investigating others.

If there are any questions, contact John Price at 509-372-7921.

Sincerely,

Jane A. Hedges Program Manager

Nuclear Waste Program

7Whale

lc/aa Enclosure

cc: See next page

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Mr. Keith A. Klein April 26, 2007 Page 2

## cc w/enc:

Kevin Bazzell, USDOE Terry Noland, USDOE Kent Westover, USDOE Rick Donahoe, WCH Stuart Harris, CTUIR Gabriel Bohnee, NPT Russell Jim, YN Ken Niles, ODOE

Administrative Record: M-16, 100-HR-2, 100-HR-2, 100-HR-3

**Environmental Portal** 

Change Number	Federal Facility Agreement and Consent Order	Date	
M-16-07-03	Change Control Form Do not use blue ink. Type or print using black ink.	April 12, 2007	
Originator		Phone	
Kevin Bazzell (U.S. Department of Energy, Richland Operations Office [DOE])		(509) 373-0463	
Class of Change			
[ ] I - Signatories [X] II - Executive Manager [ ] [II - Project Manager			
Change Title			
Delete Interim Milestone M-16-50, "Initiate Remedial Actions for Remaining Waste Sites for 100-H Area" due July 31, 2007.			
Description/Justification of Change			
<b>Description:</b> M-16-50 was developed in April 2002 under a Class I change request (M-16-01-05). Extensive remedial actions were performed in the 100-H Area in the late 1990s and focused on high priority liquid effluent waste sites. These sites received extensive quantities of liquid wastes from operating nuclear facilities. Remediation of the 100-H liquid effluent waste sites was completed in FY2000 under the Environmental Restoration Contract. The schedule for beginning remediation of the remaining sites at 100-H is governed by M-16-50, and is scheduled to begin by July 31, 2007. (See continued description/justification on the next pages).			
Impact of Change			
<ul> <li>Delete M-16-50, "Initiate Remedial Actions for Remaining Waste Sites for 100-H Area"</li> <li>No impact is currently identified to M-16-51, "Complete the Interim Remedial Actions for 100 H Area".</li> <li>Focus additional resources to the 100-D Area remediation due to extensive chromium contamination, and accelerate completion of 100-D remediation efforts. This is one part of an overall strategic evaluation of the changed River Corridor priorities. Areas of focus for acceleration at 100-D include: 1) removal of railroad tracks and areas under the tracks that are highly suspect areas for chromium contamination from leaking railcars, 2) characterize and potentially remediate several suspect waste sites that may contain chromium, and 3) general overall remediation of other remaining sites and burial grounds.</li> </ul>			
Affected Documents		,	
Hanford Federal Facility Agreement and Consent Order Remedial Design Report/Remedial Action Work Plan for the 100 Area, DOE/RL-96-17, Rev. 5			
Approvals  DOE	ApprovedDisapproved	Page 1 of 2	
Ecology N/A	Date Date Approved Disapproved Disapproved Disapproved		

Change Form M-16-07-03 Page 2 of 2

Description/Justification (continued)

In the 100-D Area, remediation of remaining sites began in June 2006 and has been ongoing. During the course of nearly 1 year of soil remediation, significant sources of chromium have been discovered in old, abandoned pipelines and releases from these pipelines to the soil are evident. The two waste sites that have been or are being remediated are the 100-D-30 and 100-D-56 waste sites. Ecology identified these as high priority sites, and provided that input to DOE. Remediation of these sites requires treatment of contaminated soils to meet waste disposal requirement, as well as treatment of the recovered liquid chromium (approximately 1500 gallons). More chromium contamination sites are expected, and nearly 4 years of remediation remains based on current design volumes. DOE and Ecology continue to advocate the 100-D area as a high priority area, have a desire to accelerate cleanup of sources, and continue with groundwater remediation in 100-HR-3. The groundwater unit under 100-H and 100-D Areas is one groundwater unit and it is the 100-HR-3 Operable Unit.

Additionally, the DOE groundwater program recently began a chromium investigation at the 100-D Area to characterize and define the upgradient end of the southwest groundwater chromium plume in order to refine the location of the source of the chromium groundwater contamination. Seven new groundwater monitoring wells were installed in February and March 2007, from which samples will be collected every 2 weeks and analyzed for hexavalent chromium and other constituents. The highest initial groundwater samples from these wells had a hexavalent chromium concentration of 10,580 micrograms/liter (ug/L), and the lowest was 16 ug/L. The drinking water standard is 50 ug/L. In approximately sixmonths, the chemical and head data will be interpreted using geostatistics and other methods to locate or significantly narrow the probable location of the chromium source feeding this groundwater plume.

## Proposal:

Delete M-16-50 due July 31, 2007, and focus additional resources to the 100-D Area to accelerate the completion of the remediation at the 100-D Area. This is one part of an overall strategic evaluation of the changed River Corridor priorities. RL will also provide Ecology updated 100-H and 100-D remediation schedules in accordance with Section 4.1 of the Hanford Federal Facility Agreement and Consent Order.

Areas of focus for acceleration at 100-D include: 1) removal of railroad tracks and areas under the tracks that are highly suspect areas for chromium contamination from leaking railcars, 2) characterize and potentially remediate several suspect waste sites that may contain chromium, and 3) general overall remediation of other remaining sites and burial grounds.

**Justification:** Based on the information above, including the early and ongoing discussions held with Ecology, DOE believes that deleting M-16-50 is an acceptable priority change.

Hanford Federal Facility Agreement and Consent Order Interim Milestone is deleted as shown below using strikeout to indicated text deletions:

Milestone Number	Milestone Description	Completion Date
M-16-50	Initiate Interim Response Actions for Remaining Waste Sites for 100-H Area	July 31, 2007